Royal Australasian College of Surgeons

Notes to Candidates
Paediatric Surgery Fellowship Examination 2024

The following information is provided to help you the candidate prepare for the Fellowship Examination in Paediatric Surgery. It is hoped that after reading this, you will have a better understanding of the structure of the examination and the level of knowledge and expertise expected.

The benchmark for the Fellowship Examination is to assess whether you are ready to practice Paediatric Surgery at a level of competency equivalent to that of a specialist in Paediatric Surgery in their first year of independent practice. Inherent to this assessment is the expectation that if successful you will not only have sound knowledge of the range of conditions that a Paediatric Surgeon commonly encounters, but also will be able to appropriately assess, investigate and manage patients with these conditions. Also implicit is the graduating surgeon shows competency in safe management decisions that prepares you to work in the different settings within Australia and Aotearoa / New Zealand, in which Paediatric Surgeons conduct practice both urgently and electively.

1 CONDUCT OF EXAMINATION

Two examiners will be present for each clinical and viva component of the exam.

The Clinical/Viva segments may be conducted simultaneously to multiple candidates. This may occur at a single site or multiple sites.

An observer may be present for any of the clinical sections of the exam. The candidate will always be introduced to the observer and be aware of their presence. The observers are there to ensure correct process is followed by the examiners and to observe the conduct of the examination. Observers can be other speciality examiners, examination senior staff educators or from the Fellowship Examiners executive. Supervisors of training and other eligible Paediatric Surgical fellows may also observe. At no time do the observers mark or comment on candidate performance during or after the examination.

2 THE EXAM CONTENT

The content of the exams is defined by the Curriculum as developed by the Training Committee in Paediatric Surgery. More information about the Curriculum is available on the RACS website:

https://www.surgeons.org/Trainees/surgical-specialties/paediatric-surgery

The questions, scenarios or cases in each segment may refer to each of the levels of cognitive function (i.e. knowledge/comprehension, application/analysis or synthesis/evaluation) or, where appropriate may be a global assessment.

Wherever possible, evaluation of the ten surgical competencies is taken into consideration throughout the assessment process. The relevant areas are the following:

MEDICAL EXPERTISE

- Relevant basic sciences and paediatric surgery curriculum including critical analysis of essential literature
- Application of medical knowledge to competent practice
- Significance of symptoms/features identified and addressed.
- Potential pathologies identified.

JUDGEMENT – CLINICAL DECISION MAKING

History Taking and Examination:

- Focused history and evaluation pertinent to the patient, family and condition.
- Description of physical examination.
- Demonstration of appropriate patient interaction.

Investigations:

- Identification of appropriate investigations.
- Justification for selection of investigations.
- Analysis of data from investigations.

Differential Diagnosis:

- Possible alternatives identified and considered.
- Justification of possible alternatives from evidence.
- Clinical implications of the alternatives considered.

Treatment and Management:

- Appropriately selected treatment.
- Safe and appropriate management plan that takes into account patient's needs.
- Consideration of on-going management requirements.
- Consideration of other required professional support.

TECHNICAL EXPERTISE

- Knowledge and conduct of surgical procedures appropriate for the condition and diagnosis.
- Significant potential risk factors identified.
- Attention to safety of patient, self and others.

COMMUNICATION

- Clear, complete, and appropriate information for the patient and caregivers.
- Appropriate communication of risks, advantages and alternatives of any management strategies advocated.
- Prognosis reflecting the most likely outcomes.

LEADERSHIP AND MANAGEMENT

- Reasons for selection of investigations and treatment indicating consideration of patient needs and system constraints.

PROFESSIONALISM AND ETHICS:

- Clear understanding of medico-legal and ethical issues in relation to the patient and their management.

COLLABORATION:

- Understanding of other healthcare professional's involvement and roles in patient management.
- Demonstrating ability to initiate involvement and assess input of other healthcare workers in the patient's management.

3 THE MARKING SYSTEM

Your performance is assessed by two examiners in each segment. Within each segment there is a pre-determined number of marking points.

You will be assessed by more than one pair of examiners across the entirety of the FEX. Each segment of the examination is marked separately without reference to other segments. The results in each segment are collated by the Senior Examiner. Your progress and final result remains unknown to individual examiners until the meeting of the Specialty Court at the conclusion of the examination.

The exam is marked using the Expanded Close Marking System (ECMS). Each marking point is scored according to the ECMS grades:

4	=	Well above the required standard.
3	=	At or above the required standard.
2	=	Below the required standard.
1	=	Well below the required standard.

The grades achieved in these marking points are used by each examiner to conclude their individual overall mark and then by the examining pair to determine a final consensus grade of Pass or Fail for that segment. Although each exam segment contains a different number of Marking Points, all segments have equal weighting in determining if your overall performance is satisfactory.

At the conclusion of all seven segments, the Specialty Court in Paediatric Surgery (comprising the Senior Examiner and all examiners participating in that exam) meets to discuss your results. If you have been successful in all segments of the exam, you have automatically passed the Examination without further discussion.

Candidates who have not passed all 7 sections are deemed to have failed the exam. Candidates who have failed 3 or more segments of the exam have failed the Examination without further discussion.

Candidates who have failed 1 or 2 segments of the exam however may (but not always) be elevated to a pass by the Court if their performance in a passing segment of the exam compensates for a borderline or poor performance in another failed segment of the exam when similar subject areas are covered. Overall performance in the exam therefore is based on consideration of the distribution of all the marking point grades through all seven segments.

4 THE STRUCTURE OF THE EXAMINATION

There are seven components (segments) consisting of two written and five clinical/viva examinations.

The written segments are completed approximately a month prior to the clinical/viva segments (in April and August). Candidates nominate which venue they wish to attend; venues are available in Adelaide, Brisbane, Hobart, Melbourne, Sydney, Perth, in Australia and in Auckland and Wellington in Aotearoa New Zealand.

The Clinical/viva segments are held in May and September, and occur from Friday to Sunday.

The dates for the 2024 Fellowship Examinations can be found on the RACS website at the following address:

https://www.surgeons.org/examinations/dates-locations-and-deadlines

5 WRITTEN EXAMINATION

The Paediatric Surgery written examination is delivered electronically.

This examination consists of two separate segments. The first examination is **130 minutes** long and is in the morning followed by an afternoon examination of **130 minutes**.

The main objective of the written examination is to test the breadth and understanding of the candidate's knowledge acquired during their training. The questions evaluate your recognition of and understanding of complications, expectations, clinical management, decision-making and alternatives of management in key areas of paediatric surgical practice. Aspects of anatomy, pathology and embryology will be included.

Candidates are encouraged to view the Demonstration version of the electronic format available at (login required):

https://www.surgeons.org/examinations/fellowship-examination-fex/preparing-for-the-fellowship-examination/preparing-for-the-written-component

Important Information
1. *Answers are typed in the text box provided for each question. The amount of space provided for essay questions is unlimited.*
2. *Answers are auto-saved every 60 seconds and whenever the 'Next' button is clicked.*
3. *If a candidate runs out of time, all answers will be submitted automatically, and the examination will close.*

EXAMINATION ONE – 130 MINUTES

Examination One consists of 50 Spot Test questions with each question of equal value. Spots may include clinical and operative photos, laboratory results, histology slides and medical imaging.

EXAMINATION TWO – 130 MINUTES

Examination Two consists of eight questions of equal marks covering any aspect of paediatric surgery, including applied pathology, anatomy and embryology. The questions are generally clinically orientated, across the breadth of the syllabus, and test the application of knowledge rather than pure knowledge itself. The use of diagrams, algorithms and other 'drawn' exam techniques can be used if required. Diagram Paper will be provided where needed.

There is a generic question that explores the professional competencies specifically and will be based on the same theme across all specialties. Each of the specialties adapt this question to be relevant to their curriculum.

6 CLINICAL/VIVAS

The order in which the five clinical/viva components are examined may vary from the order listed below. You will receive a timetable from the Examinations Department closer to the examination date which will outline the order.

In each viva examination segment, the candidate is examined by a pair of examiners. The examiners will introduce themselves and will also wear name badges. They will introduce any observer and their role, indicating that they are observing the Examiners and not taking part in the examination (assessment) process. The Examiners will initially address you by your candidate number but may ask if you would prefer to be addressed by your name during the conduct of the exam. This is to help facilitate the exam as a discussion between colleagues and in no way represents any bias towards a particular candidate.

The vivas are designed as logically guided discussions based around three or four pre-planned scenarios. Clarification should always be sought if there is ambiguity to any component of the exam.

In a typical viva exam, the scenario will be presented on a computer screen which allows all information to be presented clearly and facilitates discussion with the examining pair. All candidates should anticipate being moved along between segments of the viva. This is done for a variety of reasons but importantly allows each candidate to be exposed to all components of the viva. It is in no way a reflection of performance during the exam.

Candidates are encouraged to read the Regulations for Surgical Education and Training (SET) in Paediatric Surgery which can be found on the College website. http://www.surgeons.org/becoming-a-surgeon/surgical-education-training/examinations/fellowship-examination/preparing-for-the-written-examination/

MEDIUM CASES – 40 MINUTES

20 minutes for history and examination as well as gathering thoughts for management plan.

20 minutes of related questions with two examiners.

The patient and caregivers may be present as a Telehealth consultation or in person / face to face. One Clinical Medium Case is to be completed. Both examiners observe you during the history taking and examination of the patient (this component does constitute part of the exam and is assessed). You must then present to the same two examiners a summary of your findings and highlight the key clinical concerns identified. Using these clinical concerns as a starting point, the examiners will assess your ability to assimilate and organise the information obtained, present appropriate management options and discuss potential risks or issues.

In order to reproduce the situation of first-time consultation with a new patient the candidate usually receives a "referral letter" to read 5 minutes before the commencement of the exam noting the diagnosis and a brief summary of early progress. You then have 20 minutes to take a full history, examine the child and then formulate a list of current clinical issues for the child. During this 20-minute component you have the opportunity to prepare your findings and write notes. You also have the option prior to commencement, to ask for a five-minute warning before the end of this segment. Following the interaction with the patient you are isolated with the examiners to present the key clinical concerns for the child and then explore aspects of proposed relevant management including possible predicted sequelae or complications. The discussion with the examiners is based initially on your summary of clinical concerns for the patient as presenting at the

moment. Any imaging appropriate to the discussion will be produced or presented. This component of the exam lasts 20 minutes.

The candidate is assessed on their interaction with the patient and family, ability to identify and assimilate key clinical concerns and the appropriateness of their future management plan at the level of a newly graduated paediatric surgeon.

SHORT CLINICAL CASES – 35 MINUTES

Clinical short cases (up to twelve cases) involve the type of patients generally seen at an Outpatient Clinic consultation (including outreach consultation), although a few of the patients may be current inpatients. Clinical cases will be representative of the curriculum and practice of Paediatric Surgery in Australia and Aotearoa New Zealand. Approximately 3 minutes is spent with each patient. Usually a brief history is provided so that you can focus on the demonstration of the particular physical signs.

Cases may take the form of patients and their families presenting in a typical outpatients setting or cases may be presented via electronic platforms such as PowerPoint or teleconferencing (without the patient being present at the exam venue). While direct examination is not possible in virtual cases, a description of the features evident on the image, approach to examination, differential diagnosis and further management is assessed.

It is expected that a competent candidate should be able to assess at least 10 of the cases in the allotted time. An effective and efficient approach to examination, diagnosis and management is expected at the level of a graduating paediatric surgeon. Candidates are expected to conduct themselves with professionalism and proficiency including exhibiting standards of infection control. They are assessed on the clinical skills they demonstrate, their empathy with the patient, their ability to interpret the signs correctly and formulate an appropriate management plan.

CLINICAL INVESTIGATION AND MANAGEMENT – 30 MINUTES

The Clinical Investigation and Management viva involves the interpretation of investigations and management of both antenatal and postnatal cases from all areas of the Paediatric Surgery syllabus. The key elements of the assessment relate to appropriate interpretation of investigations plus clinical judgement, and/or operative decision making based on or guiding the use of investigations. Candidates should have a competent paediatric surgical specialist knowledge of commonly used investigations including how they are performed and issues around the shortcomings of that investigation.

NEONATAL SURGERY – 30 MINUTES

The Neonatal Surgery component involves candidates answering questions regarding aspects of neonatal surgery including, but not limited to, antenatal counselling, applied anatomy and pathology, operative surgery, imaging, presentation, clinical signs, investigation and management (including counselling and knowledge of short to long term outcomes of neonatal surgical patients).

OPERATIVE SURGERY – 30 MINUTES

The Operative Viva involves asking questions on operative procedures that are usually encountered in paediatric surgery.

On occasions, examiners may require the candidate to explain the procedure from the beginning, including any special pre-operative preparation, but more commonly the questions focus on specific scenarios within the procedure. Candidates should provide answers detailing the appropriate operative decision making including consent and the choice of safe alternatives.

The Operative, Neonatal and CIM vivas are semi-structured vivas such that all candidates will get the same stem questions, although the detailed questions may vary according to the response of the candidate.

7 COPING WITH THE EXAMINATION

We acknowledge that the Fellowship Examination is a challenging experience for candidates, but a lifetime of surgical practice is also challenging. Members of the Court of Examiners have been carefully selected to have not only good knowledge of the training requirements and the curriculum for Paediatric Surgery, but also a strong interest in the well-being of Trainees and International Medical Graduates and a demonstrated capacity for balanced and fair assessment of candidates.

Preparation, both physically and mentally is the key to a successful exam. Practice in completing written papers is essential, answering both the long and short question components is important, including getting the timing right. Practice in answering written questions is an excellent learning tool.

Undoubtedly a lot of time needs to be spent revising the theory that underpins our specialty in the lead up to the written papers and vivas. However, success in the exams requires good interpersonal skills with patients, accurate examination skills and the ability to synthesise information provided to devise and discuss a reasonable treatment plan. It is important to maintain continuous contact and involvement with the clinical environment in the lead up to the exam. Treating every patient seen in the clinical setting as a potential medium or short case will undoubtedly improve the comfort in performance in the clinical component of the exam.

I cannot emphasise enough that your presentation at and preparation for the Fellowship Examination is aimed at becoming a consultant in the first year of practice. The vivas are looking for a professional discussion outlining the evidence for decisions made and predictions of outcomes for real paediatric surgery patients. You should be having those discussions at ward rounds and in clinics now in training and in your future career. Ability to assimilate knowledge and efficiently assess clinical details to make management plans are essential for a working consultant paediatric surgeon. A first-year consultant doesn't need sub-speciality fellowship knowledge of each step of complex quaternary procedures. But you do need to know when to refer, what is the eligibility, aims and principles of complex quaternary procedures and how to prepare patients and caregivers for management. You need to know what different algorithms for decision making exist in ANZ and what evidence you use for deciding which one you will follow. You do need to know all the essentials of tertiary paediatric surgery applied knowledge and technical skills. This is what the examiners are seeking in each successful candidate. This is the underlying tenet of the training scheme.

Vivas should be treated as an interaction with departmental colleagues (albeit senior) rather than an interrogation by the examiners. Interaction with patients in the clinical vivas should be the same as the interaction you have with patients under your care in everyday clinical situations. Is important to remember that the patients have taken time out to help with the exam; they need to be treated politely and professionally.

Candidates who find they struggle to answer a component of a viva should ask for clarification. The examiners will give the clarification or may move forward to another area. If the examiner suggests a candidate reconsider an answer – they should be trusted, and the prompts followed. Examiners are trying to help candidates, not trick them.

If a candidate is unsuccessful a composite written report will be provided by the Senior Examiner to the Board Chair, the current Supervisor and candidate through the Examinations Department. This report will be sent within two weeks of the Fellowship Examination. Candidates should liaise with the Board Chair and Supervisor to arrange an interview within four weeks. Examiners should not be approached directly.

Please note that copies of old exam papers will no longer be available. Examples of the style of questions in the written paper two with model answers can be made available.

I wish you well in your examination preparation and look forward to meeting you.

For any queries prior to the examination, please contact the Examinations Department by email: examinations@surgeons.org.

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